

All Other Personnel: Any other person associated with supporting PF personnel and functions not included in the above categories and whose position is paid from the facilities' Safeguards and Security Budget.

Contractor Protective Force On-Hand Strength, FY1992 - FY2001

Albuquerque Operations Office Facilities

Kansas City Plant	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	17	0	76	0	15	108	11	119
FY 1993	17	0	72	0	15	104	11	115
FY 1994	13	0	63	0	15	91	11	102
FY 1995	10	0	60	0	15	85	7	92
FY 1996	50	0	35	0	16	101	8	109
FY 1997	42	0	37	0	16	95	8	103
FY 1998	33	0	34	0	16	83	6	89
FY 1999	32	0	32	0	16	80	10	90
FY 2000	36	0	33	0	15	84	5	89
FY 2001	45	0	37	0	14	96	5	101

Los Alamos Lab	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	0	16	254	52	50	372	63	435
FY 1993	56	18	201	67	50	392	64	456
FY 1994	56	18	223	61	57	415	41	456
FY 1995	69	12	173	47	57	358	39	397
FY 1996	38	11	162	44	50	305	85	390
FY 1997	29	11	161	51	52	304	88	392
FY 1998	33	0	214	51	60	358	95	453
FY 1999	39	0	192	62	64	357	104	461
FY 2000	50	0	203	58	61	372	103	475
FY 2001	43	0	202	53	58	356	107	463

Pantex Plant	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	18	0	189	104	50	361	86	447
FY 1993	18	0	201	104	58	381	92	473
FY 1994	17	0	221	104	60	402	99	501
FY 1995	16	0	214	104	58	392	32	424
FY 1996	17	0	218	104	58	397	20	417
FY 1997	6	0	234	104	52	396	16	412
FY 1998	6	0	220	104	52	382	16	398
FY 1999	2	0	245	110	42	399	16	415
FY 2000	2	0	258	110	53	423	15	438
FY 2001	2	0	271	110	54	437	16	453

Sandia Labs - NM	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	12	0	91	74	0	177	107	284
FY 1993	8	0	87	58	0	153	107	260
FY 1994	7	0	70	50	25	152	14	166
FY 1995	26	0	56	41	24	147	10	157
FY 1996	34	0	49	44	24	151	11	162
FY 1997	34	0	44	47	25	150	4	154
FY 1998	27	0	40	50	26	143	4	147
FY 1999	31	0	33	59	30	153	8	161
FY 2000	5	0	30	78	26	139	8	147
FY 2001	5	0	59	47	26	137	4	141

Sandia Labs-CA	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	0	0	42	0	0	42	28	70
FY 1993	4	0	40	0	0	44	28	72
FY 1994	0	36	0	0	3	39	21	60
FY 1995	0	0	28	0	3	31	22	53
FY 1996	0	0	27	0	4	31	13	44
FY 1997	0	0	23	0	4	27	11	38
FY 1998	0	0	29	0	4	33	11	44
FY 1999	0	0	36	0	4	40	12	52
FY 2000	0	0	30	0	5	35	12	47
FY 2001	0	0	32	0	5	37	12	49

WIPP	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	7	0	17	0	0	24	13	37
FY 1993	4	0	16	0	0	20	13	33
FY 1994	22	0	15	0	0	37	12	49
FY 1995	16	0	0	0	5	21	6	27
FY 1996	14	0	0	0	5	19	6	25
FY 1997	14	0	0	0	5	19	6	25
FY 1998	14	0	0	0	5	19	6	25
FY 1999	14	0	0	0	5	19	6	25
FY 2000	14	0	0	0	5	19	7	26
FY 2001	14	0	0	0	4	18	7	25

Grand Junction	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	13	0	0	0	0	13	5	18
FY 1993	13	0	0	0	0	13	5	18
FY 1994	6	0	0	0	5	11	6	17
FY 1995	6	0	0	0	4	10	5	15
FY 1996	7	0	0	0	3	10	5	15
FY 1997	7	0	0	0	3	10	5	15
FY 1998	3	0	0	0	3	6	2	8
FY 1999	5	0	0	0	1	6	2	8
FY 2000	5	0	0	0	1	6	1	7
FY 2001	5	0	0	0	1	6	1	7

Tonopah Test Range	SO	SPO I	SPO II	SPO III	Uniformed Supervisor	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	8	0	58	0	0	66	19	85
FY 1993	0	0	49	0	0	49	19	68
FY 1994	0	0	41	0	0	41	24	65
FY 1995	1	0	37	0	7	45	11	56
FY 1998**	4	0	32	0	7	43	8	51
FY 1999	7	0	26	0	7	40	7	47
FY 2000	3	0	30	0	6	39	7	46
FY 2001	3	0	33	0	6	42	8	50

Pinellas Plant	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	0	0	73	0	0	73	19	92
FY 1993	0	0	58	0	0	58	19	77
FY 1994	35	0	0	0	5	40	15	55
FY 1995	22	0	0	0	5	27	11	38
FY 1996	20	0	0	0	5	25	10	35
FY 1997*	0	0	0	0	0	0	0	0

* Pinellas protective force discontinued with plant deactivation.

Chicago Operations Office Facilities

Argonne East	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	11	0	33	0	9	53	34	87
FY 1993	7	0	17	0	9	33	36	69
FY 1994	5	0	16	0	9	30	34	64
FY 1995	23	0	0	0	9	32	6	38
FY 1996	16	0	0	0	9	25	6	31
FY 1997	15	0	0	0	8	23	6	29
FY 1998	14	0	0	0	6	20	6	26
FY 1999	14	0	0	0	5	19	6	25
FY 2000	14	0	0	0	5	19	6	25
FY 2001	18	0	0	0	6	24	4	28

Argonne West	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	0	0	34	0	9	43	20	63
FY 1995	0	0	34	0	9	43	20	63
FY 1994	0	0	33	0	9	42	20	62
FY 1995	0	0	29	0	9	38	20	58
FY 1996	0	0	28	0	9	37	20	57
FY 1997	0	0	25	22	9	56	22	78

FY 1998	0	0	17	22	9	48	17	65
FY 1999	0	0	15	20	10	45	15	60
FY 2000	0	0	12	22	10	44	15	59
FY 2001	0	0	20	22	10	52	15	67

Brook-haven Lab	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	0	0	60	0	10	70	20	90
FY 1993	3	0	51	0	10	64	20	84
FY 1994	3	0	46	0	10	59	21	80
FY 1995	3	0	42	0	10	55	22	77
FY 1996	2	0	44	0	9	55	22	77
FY 1997	3	0	43	0	9	55	22	77
FY 1998	2	0	42	0	9	53	21	74
FY 1999	1	0	41	0	9	51	19	70
FY 2000	1	0	36	0	7	44	22	66
FY 2001	0	0	37	0	7	44	6	50

Ames Lab	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1994	4	0	0	0	0	4	8	12
FY 1995	13	0	0	0	0	13	7	20
FY 1996	10	0	0	0	0	10	7	17
FY 1997	6	0	0	0	0	6	7	13
FY 1998	6	0	0	0	0	6	7	13
FY 1999	6	0	0	0	0	6	8	14
FY 2000	6	0	0	0	0	6	7	13
FY 2001	6	0	0	0	0	6	6	12

Fermi Lab	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1994	35	0	0	0	0	35	6	41
FY 1995	41	0	0	0	3	44	12	56
FY 1996	32	0	0	0	3	35	19	54
FY 1997	27	0	0	0	3	30	18	48
FY 1998	27	0	0	0	3	30	17	47
FY 1999	13	0	0	0	6	19	17	36
FY 2000	13	0	0	0	3	16	18	34
FY 2001	19	0	0	0	5	24	7	31

Princeton Lab	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1994*	15	0	0	0	4	19	9	28
FY 1995	12	0	0	0	4	16	5	21
FY 1996	15	0	0	0	3	18	3	21
FY 1997	15	0	0	0	3	18	2	20
FY 1998	13	0	0	0	3	16	2	18
FY 1999	13	0	0	0	3	16	2	18
FY 2000	15	0	0	0	3	18	2	20
FY 2001	15	0	0	0	3	18	2	20

* First Report

Idaho Operations Office Facilities

Idaho	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	25	0	0	267	46	338	65	403
FY 1993	23	0	223	38	36	320	62	382
FY 1994	60	0	141	38	36	275	52	327
FY 1995	39	0	97	23	35	194	44	238
FY 1996	27	0	84	16	20	147	28	175
FY 1997	27	0	83	16	24	150	27	177
FY 1998	28	0	80	16	22	146	26	172
FY 1999	34	0	77	17	22	150	25	175
FY 2000	25	0	79	28	22	154	27	181
FY 2001	20	0	65	24	21	130	24	154

Nevada Operations Office, Test Site

Test Site	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	17	0	130	146	26	296	84	380
FY 1993	9	0	90	132	25	256	85	341
FY 1994	11	0	85	65	25	186	73	259
FY 1995	8	0	113	0	20	141	73	214
FY 1996	7	0	103	0	19	129	65	194
FY 1997	6	0	105	0	19	130	66	196
FY 1998	4	0	116	0	21	141	65	206
FY 1999	4	0	106	0	20	130	99	229
FY 2000	4	0	108	0	22	134	97	231
FY 2001	4	0	115	0	21	140	99	239

Oakland Operations Office, Lawrence Livermore Laboratory

Lawrence Livermore Lab	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	8	0	117	24	11	160	20	180
FY 1993	10	0	112	23	35	180	20	200
FY 1994	14	10	131	0	35	190	40	241
FY 1995	6	9	117	0	35	167	39	206
FY 1996	0	5	109	0	32	146	36	182
FY 1997	15	0	90	0	29	134	46	180
FY 1998	4	0	73	32	27	136	48	184
FY 1999	12	0	61	51	26	150	49	199
FY 2000	9	0	58	63	27	157	50	207
FY 2001	4	0	64	60	27	155	49	204

Oak Ridge Operations Office Facilities

Y-12 Plant	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	41	0	359	114	0	519	122	641
FY 1993	30	8	158	66	70	332	37	369
FY 1994	24	0	145	66	60	295	1	296
FY 1995	34	0	136	94	58	322	1	323
FY 1996	28	0	132	85	58	303	4	307
FY 1997	26	0	127	81	58	292	1	293
FY 1998	16	0	142	79	58	295	1	296
FY 1999	16	3	134	89	56	298	6	304
FY 2000	15	0	142	83	58	298	4	302
FY 2001	15	0	160	88	56	319	4	323

ETTP	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	8	0	101	0	0	109	39	148
FY 1993	6	0	83	0	15	104	23	127
FY 1994	12	0	51	0	13	76	3	79
FY 1995	11	0	49	0	13	73	3	76
FY 1996	11	0	44	0	12	67	3	70
FY 1997	2	0	44	0	12	58	2	60
FY 1998	4	0	42	0	13	59	2	61
FY 1999	4	0	43	0	11	58	4	62
FY 2000	5	0	44	0	12	61	4	55
FY 2001	4	0	43	0	11	58	4	62

Oak Ridge Office	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	0	0	47	0	0	47	10	57
FY 1993	38	0	0	0	6	44	4	48
FY 1994	39	0	0	0	6	45	1	46
FY 1995	39	0	0	0	7	46	1	47
FY 1996	34	0	0	0	12	46	1	47
FY 1997	0	21	0	0	10	31	2	33
FY 1998	0	22	0	0	11	33	2	35
FY 1999	0	22	0	0	12	34	1	35
FY 2000	0	22	0	0	12	34	1	35
FY 2001	0	17	0	0	12	29	1	30

CTF/ESPF	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
1992 NoData								
1993 (CTF)	0	0	0	0	0	0	155	155
1994 (CTF)	0	0	0	0	0	0	136	136
FY 1995	0	0	0	0	0	0	18	18
FY 1996*	0	0	0	0	0	0	18	18

* Discontinued section.

Portsmouth Plant	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992*	6	0	137	65	0	208	40	248
FY 2001	3	0	34	0	0	37	6	43

Paducah Plant	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992*	1	0	56	0	0	57	32	89
FY 2001	2	0	21	0	0	23	2	25

* Discontinued count when plant went to the United States Enrichment Corporation. FY2001 data obtained for one-time data call.

West Valley	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1995*	9	10	0	0	5	24	7	31
FY 1996	19	0	0	0	5	24	6	30
FY 1997	19	0	0	0	5	24	6	30
FY 1998	19	0	0	0	5	24	5	29
FY 1999	19	0	0	0	6	25	5	30
FY 2000	19	0	0	0	5	24	5	29
FY 2001	12	0	0	0	5	17	8	25

* First year reported.

Richland Operations Office Facilities

Hanford Site	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	37	0	231	88	30	386	49	435
FY 1993	13	0	146	18	20	197	66	263
FY 1994	0	0	114	30	20	164	54	218
FY 1995	6	0	140	31	19	196	4	200
FY 1996	4	0	136	31	21	192	3	195
FY 1997	0	0	106	26	55	187	2	189
FY 1998	3	0	134	35	24	196	2	198
FY 1999	3	0	132	35	22	192	2	194
FY 2000	3	0	138	35	23	199	2	201
FY 2001	6	0	132	36	23	197	2	199

Rocky Flats Field Office, Rocky Flats Environmental Technology Site (RFETS)

RFETS	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	26	0	334	46	39	445	62	507
FY 1993	38	0	320	32	39	429	70	499
FY 1994	29	0	287	32	39	387	86	473
FY 1995	6	0	210	30	37	283	103	386
FY 1996	7	0	195	22	42	266	77	343
FY 1997	8	0	189	23	31	251	57	308
FY 1998	6	0	196	27	31	260	53	313
FY 1999	6	0	188	34	29	257	39	296
FY 2000	7	0	131	39	27	204	35	239
FY 2001	8	0	120	34	22	184	33	217

Savannah River Operations Office Facilities

Site Facilities	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	44	0	665	33	125	867	267	1134
FY 1993	107	0	550	31	125	813	239	1052
FY 1994	107	0	513	30	108	758	246	1004
FY 1995	38	0	388	33	99	558	242	800
FY 1996	29	0	366	32	58	485	253	738
FY 1997	29	0	356	32	58	475	272	747
FY 1998	32	0	349	29	63	473	270	743
FY 1999	28	0	341	31	63	463	269	732
FY 2000	31	0	391	35	67	524	269	793
FY 2001	30	0	391	32	69	522	269	791

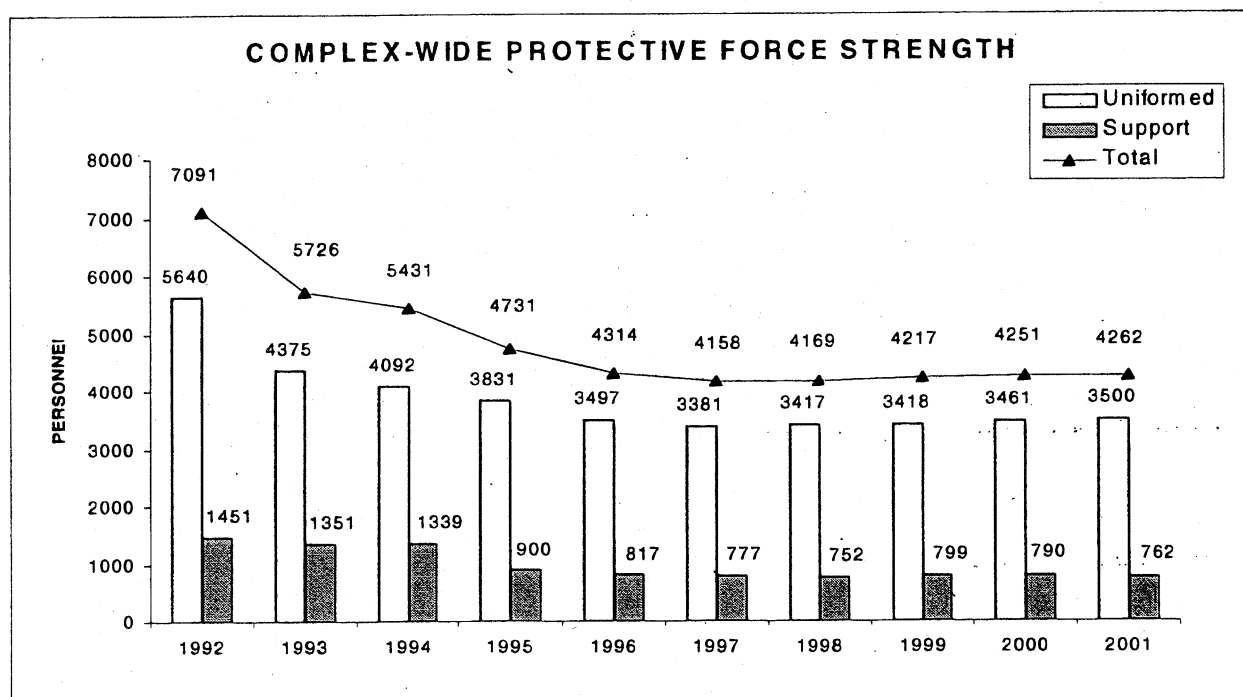
Strategic Petroleum Reserve Facilities

Facilities	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	0	0	233	0	35	268	57	325
FY 1993	2	0	198	0	33	233	47	280
FY 1994	2	0	188	0	33	223	48	271
FY 1995	1	0	166	0	33	200	43	243
FY 1996	1	0	150	0	30	181	31	212
FY 1997	4	0	115	0	30	149	18	167
FY 1998	2	0	114	0	30	146	17	163
FY 1999	7	0	116	0	30	153	18	171
FY 2000	11	0	106	0	30	147	18	165
FY 2001	9	0	113	0	29	151	17	168

DOE Headquarters Metropolitan D.C. Complex

Headquarters Complex	SO	SPO I	SPO II	SPO III	Uniformed Supervisors	Total Uniformed	Non-uniformed Support	Total Force Strength
FY 1992	0	0	156	0	0	156	44	200
FY 1993	123	0	0	0	16	139	18	157
FY 1994	109	0	0	0	16	125	17	142
FY 1995	132	0	0	0	16	148	19	167
FY 1996	103	0	0	0	16	119	15	134
FY 1997	126	0	0	0	14	140	17	157
FY 1998	132	0	0	0	14	146	16	162
FY 1999	74	0	37	0	14	125	20	145
FY 2000	72	0	34	0	14	120	22	142
FY 2001	77	0	33	0	14	124	24	148

Graphical Depiction of Contractor Protective Force Strength Changes FY 1992 - FY 2001



	Oct-92	Oct-93	Oct-94	Oct-95	Oct-96	Oct-97	Oct-98	Oct-99	Oct-00	Oct-01
Uniformed	5640	4375	4092	3831	3497	3381	3417	3418	3461	3500
Support	1451	1351	1339	900	817	777	752	799	790	762
Total	7091	5726	5431	4731	4314	4158	4169	4217	4251	4262

	Oct-99	Jan-00	Apr-00	Jul-00	Oct-00	Jan-01	Apr-01	Jul-01	Oct-01
Uniformed	3418	3479	3493	3481	3461	3465	3428	3442	3500
Support	799	796	787	796	790	790	793	768	762
Total	4217	4275	4280	4277	4251	4255	4221	4210	4262

SECTION: Questions on Resources Allocated to and Organization of DOE Safeguards and Security

Page 20, Question 1b: For each year since 1992, and for each DOE site, please indicate the amount of funds the director of the Office of Safeguards and Security recommended be spent for safeguards and security.

Answer: Each Lead Program Secretarial Office (LPSO) is responsible for developing the budget for all aspects of their respective programs, to include safeguards and security. Prior to FY 2001, the safeguards and security budget estimate was a crosscut budget that was a compilation of each Departmental program's estimates of safeguards and security costs throughout the complex. These estimates were received from the National Nuclear Security Administration (NNSA), Environmental Management (EM), the Office of Science, the Chief Information Officer, and the Office of Security. Beginning in FY 2001, the Department established specific safeguards and security budgets within the budget requests of each LPSO in the Energy and Water Development Appropriation.

Displayed on the attached chart are the safeguards and security estimates by site for fiscal years 1992 through 2000 and the actual safeguards and security budgets by site for FY 2001 - 2003.

Trend Analysis

DEPARTMENT OF ENERGY
Safeguards and Security Crosscut
Trend Analysis by Facility
(\$ in thousands)

Organization/Facility	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Albuquerque												
Albuquerque Operations Office	88,892	80,200	98,739	94,610	105,639	113,123	110,372	24,428	10,745	24,247	32,184	33,848
Carlsbad Area Office & WIPP	2,919	3,021	2,423	1,957	2,601	1,898	2,118	1,994	2,725	2,798	2,550	2,506
Grand Junction Office	-	932	878	954	1,254	856	321	453	370	422	228	589
Kansas City Area Office & Plant	6,960	6,994	7,382	7,029	4,954	7,715	6,879	9,058	11,125	12,055	15,110	13,343
Los Alamos Area Office	84,108	66,934	53,827	60,220	46,414	51,021	55,452	99,463	99,123	109,129	119,369	123,444
Amarillo Area Office & Pantex	53,473	34,356	47,566	44,206	47,257	45,267	39,456	59,178	64,584	73,490	67,340	78,054
Pinellas Area Office & Plant	7,020	4,974	4,037	3,292	2,143	2,029	-	-	-	-	-	-
Kirtland Area Office & Sandia	54,371	52,768	49,364	38,398	39,108	32,505	30,630	60,722	63,815	54,028	91,443	77,988
Total, Albuquerque	297,743	250,179	264,216	250,666	249,370	254,414	245,228	255,296	252,487	276,169	328,224	329,772
Rocky Flats Field Office												
Rocky Flats Field Office	76,153	76,661	64,979	65,716	63,739	61,836	65,542	44,408	50,115	47,006	43,496	29,593
Chicago												
Chicago Operations Office	1,593	1,493	2,063	1,893	1,550	1,584	1,764	1,803	6,389	5,046	5,820	5,992
Ames Laboratory	679	448	191	196	502	137	98	223	254	264	397	409
Argonne National Laboratory	7,515	13,390	12,491	12,186	9,431	8,317	8,620	10,830	11,988	12,381	15,947	15,008
Brookhaven National Laboratory	7,344	7,016	6,532	6,446	6,927	7,363	6,550	9,093	9,585	9,428	10,916	10,970
Environmental Measurements Laboratory	-	-	-	-	265	252	132	193	-	-	-	-
Fermi National Laboratory	1,732	2,065	2,263	2,588	2,253	1,690	1,579	2,197	2,294	2,430	2,763	2,837
New Brunswick Laboratory	4,404	4,253	4,303	4,295	4,295	3,907	3,110	5,193	-	-	-	500
Princeton Plasma Physics Laboratory	1,109	1,213	1,000	854	890	511	592	1,321	1,680	1,735	1,828	1,855
Total, Chicago	24,376	29,878	28,843	28,458	26,113	23,761	22,445	30,853	32,190	31,284	37,671	37,571
Golden Field Office and NREL												
Golden Field Office and NREL	530	675	1,090	893	683	633	596	947	-	-	-	-
Idaho												
Idaho	41,547	37,936	34,087	29,968	38,681	32,175	29,064	37,767	37,094	36,682	36,261	38,259
Nevada												
Nevada	80,764	68,434	48,854	32,440	27,223	26,606	29,742	35,630	33,040	33,803	37,092	38,773
Oakland												
Oakland Operations	6,892	8,014	12,314	4,086	4,962	5,994	7,883	10,205	7,158	6,418	8,952	9,446
Lawrence Berkeley National Laboratory	-	1,137	1,048	1,048	1,117	2,932	1,231	2,758	3,612	3,492	4,706	4,753
Lawrence Livermore National Laboratory	42,309	37,370	38,629	39,825	35,094	39,265	30,620	70,654	80,296	77,867	95,008	97,258
Stanford Linear Accelerator Center	-	834	903	868	904	981	1,214	1,654	1,774	1,814	2,150	2,207
Total, Oakland	49,201	47,355	52,894	45,827	42,077	49,172	40,948	85,271	92,840	89,591	110,816	113,664

DEPARTMENT OF ENERGY
Safeguards and Security Crosscut
Trend Analysis by Facility
(\$ in thousands)

Organization/Facility	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Oak Ridge												
Oak Ridge Operations	82,877	7,553	12,145	11,047	6,823	8,331	8,109	12,262	4,760	12,987	9,250	9,715
Thomas Jefferson National Accelerator	-	330	345	502	420	432	401	465	480	552	947	972
East Tennessee Tech Park	-	15,367	11,561	8,762	-	-	-	11,128	13,889	11,435	11,476	13,164
OR Institute for Science & Education	802	851	693	1,016	1,098	817	1,049	1,480	1,414	1,534	1,923	1,929
Oak Ridge National Laboratory	7,572	6,950	6,491	7,875	-	6,488	6,481	7,939	8,970	4,939	7,882	7,938
Paducah Gaseous Diffusion Plant	-	11,560	1,747	3,081	2,234	1,094	1,164	1,792	1,597	3,170	2,408	6,849
Portsmouth Gaseous Diffusion	-	22,532	19,004	9,328	2,689	4,029	15,623	11,371	6,374	8,274	7,449	11,917
SSCL	1,025	1,300	2,893	-	-	-	-	-	-	-	-	-
Oak Ridge Reservation/Y-12	59,755	42,256	37,658	40,344	58,824	42,190	40,803	46,710	57,381	61,393	75,416	70,181
Total, Oak Ridge	152,031	108,699	92,537	81,955	72,088	63,381	73,630	93,147	94,865	104,284	116,751	122,665
Ohio												
Ohio Field Office	-	-	-	-	-	380	371	390	-	140	-	-
Fernald	2,717	3,025	2,788	2,734	2,300	1,357	5,022	6,022	4,907	4,701	4,701	2,890
Mound Lab	10,887	8,603	10,679	9,278	6,157	5,431	3,191	6,204	5,731	5,649	5,778	4,678
West Valley	1,812	2,157	2,095	1,337	1,288	1,390	1,286	1,373	1,373	1,977	1,395	2,210
Total, Ohio	15,416	13,785	15,562	13,349	9,745	8,558	9,870	13,989	12,011	12,467	11,874	9,778
Office of Scientific & Tech Information	804	635	765	813	393	403	497	483	105	300	133	290
Richland	66,030	60,865	51,892	43,869	38,286	39,881	36,153	55,121	55,981	59,334	61,413	59,200
Savannah River	159,880	140,331	88,770	98,035	85,685	73,645	81,766	95,553	99,372	109,886	116,654	110,011
National Petroleum Tech Office	-	61	232	278	290	306	308	81	-	-	-	-
National Energy Technology Laboratory	1,958	2,099	2,154	1,270	1,349	1,477	1,934	1,923	-	-	-	-
Naval Petroleum & Oil Shale Reserves	1,097	1,180	1,245	1,269	1,180	1,260	658	34	-	-	-	-
Strategic Petroleum Reserve	18,572	19,468	14,370	14,958	13,989	10,411	11,479	10,848	-	-	-	-
Pittsburgh Naval Reactors	12,497	12,342	12,582	11,118	8,595	10,256	11,022	1,850	1,795	-	-	-
Schenectady Naval Reactors	13,522	13,208	14,067	11,539	11,984	9,725	11,090	550	660	-	-	-

DEPARTMENT OF ENERGY
Safeguards and Security Crosscut
Trend Analysis by Facility
(\$ in thousands)

Organization/Facility	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Western Area Power Administration	848	870	958	760	797	-	-	-	-	-	-	-
Nonproliferation & National Security	10,508	9,186	8,328	9,200	9,518	9,050	7,830	8,618	8,677	-	-	-
Headquarters	102,805	101,640	65,932	60,294	60,249	54,252	49,994	105,893	138,396	121,311	187,999	154,071
Total, DOE Safeguards & Security	<u>1,126,282</u>	<u>995,487</u>	<u>864,357</u>	<u>802,675</u>	<u>762,034</u>	<u>731,202</u>	<u>729,796</u>	<u>878,262</u>	<u>909,628</u>	<u>922,117</u>	<u>1,088,384</u>	<u>1,043,647</u>
Less Work for Others	-	-	-	-	-	-	-	(42,184)	(39,031)	(39,289)	(40,000)	(38,427)
Total, S&S without WFO	1,126,282	995,487	864,357	802,675	762,034	731,202	729,796	836,078	870,597	882,828	1,048,384	1,005,220

Page 21, Question 1c: For each year since 1992, and for each DOE site, please list the amount of funds actually spent on safeguards and security.

Answer: Actual cost data by site for safeguards and security activities does not exist for FY 1992. For FY 1993 through 2000, costs associated with safeguards and security activities are only estimates, since during this time the Department did not specifically budget for these activities within the programs. Beginning in FY 2001, actual costs are shown based on the Lead Program Secretarial Office budgets. Listed below is a table displaying both the estimated costs for FY 1993 - 2000 and actual costs for FY 2001.

costanalysis

DEPARTMENT OF ENERGY
Safeguards and Security (S&S)
Comparison of S&S Site-Reported Costs by
(\$ in thousands)

<u>Organization/Facility</u>	<u>FY 1992</u>	<u>FY 1993</u>	<u>FY 1994</u>	<u>FY 1995</u>	<u>FY 1996</u>	<u>FY 1997</u>
Albuquerque						
Albuquerque Operations Office	-	75,726	87,888	99,853	99,042	102,000
Carlsbad Area Office & WIPP	-	2,341	2,269	1,914	2,557	2,000
Grand Junction Office	-	886	792	837	1,108	1,000
Kansas City Area Office & Plant	-	11,864	10,181	7,630	7,330	7,000
Los Alamos Area Office	-	72,789	72,542	74,435	54,501	64,000
Amarillo Area Office & Pantex	-	48,095	44,662	51,271	47,134	44,000
Pinellas Area Office & Plant	-	5,488	4,132	2,784	2,201	1,000
Kirtland Area Office & Sandia	-	54,674	59,187	51,793	39,066	30,000
Total, Albuquerque	-	271,863	281,653	290,517	252,939	253,000
Rocky Flats Field Office	-	65,729	62,504	55,677	73,783	61,000
Chicago						
Chicago Operations Office	-	1,475	1,993	1,931	1,918	1,000
Ames Laboratory	-	534	288	195	506	1,000
Argonne National Laboratory	-	12,024	12,394	11,218	10,086	8,000
Brookhaven National Laboratory	-	6,408	5,541	6,491	6,891	7,000
Environmental Measurements Laboratory	-	-	-	-	-	-
Fermi National Laboratory	-	1,689	2,033	2,330	2,117	1,000
New Brunswick Laboratory	-	4,205	4,163	4,242	3,364	4,000
Princeton Plasma Physics Laboratory	-	1,173	1,130	831	522	1,000
Total, Chicago	-	27,508	27,542	27,238	25,404	24,000
Golden Field Office and NREL	-	699	846	831	638	1,000
Idaho Operations Office	-	38,476	35,644	28,975	32,289	31,000

DEPARTMENT OF ENERGY
Safeguards and Security (S&S)
Comparison of S&S Site-Reported Costs by Fiscal Year
(\$ in thousands)

Organization/Facility	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Nevada Operations Office	-	60,524	63,934	37,115	27,064	22,033	29,742	33,088	34,348	34,489
Oakland	-	-	-	-	-	-	-	-	-	-
Oakland Operations	-	5,505	7,221	7,504	6,245	5,293	7,883	7,840	9,452	11,452
Lawrence Berkeley National Laboratory	-	-	1,040	1,060	1,180	3,124	1,231	1,701	2,734	2,811
Lawrence Livermore National Laboratory	-	43,849	38,700	41,045	35,204	32,913	30,620	43,418	105,918	76,293
Stanford Linear Accelerator Center	-	-	887	1,011	972	1,029	1,214	1,412	1,823	1,935
Total, Oakland	-	49,354	47,848	50,620	43,601	42,359	40,948	54,371	119,927	92,491
Oak Ridge	-	-	-	-	-	-	-	-	-	-
Oak Ridge Operations	-	9,040	10,491	13,559	7,602	8,518	8,109	11,357	15,136	82,431
Thomas Jefferson National Accelerator	-	315	345	294	403	398	401	398	1,177	736
East Tennessee Tech Park	-	14,636	10,194	6,762	9,069	-	-	11,054	11,597	-
OR Institute for Science & Education	-	774	926	1,348	2,319	985	1,049	1,263	1,373	1,324
Oak Ridge National Laboratory	-	7,859	6,433	8,347	7,112	-	6,481	7,061	10,738	3,250
Paducah Gaseous Diffusion Plant	-	9,296	1,449	2,545	2,250	-	1,164	1,792	2,378	-
Portsmouth Gaseous Diffusion	-	24,405	14,768	11,584	21,811	15,845	15,623	10,868	6,001	-
Superconducting Super Collider (SSCL)	-	1,394	3,103	621	250	-	-	-	-	-
Oak Ridge Reservation/Y-12	-	51,265	39,874	40,926	38,081	48,298	40,803	46,489	52,608	11,831
Total, Oak Ridge	-	118,984	87,583	85,986	88,897	75,726	73,630	90,282	101,008	99,572

DEPARTMENT OF ENERGY
Safeguards and Security (S&S)
Comparison of S&S Site-Reported Costs by Fiscal Year
(\$ in thousands)

Organization/Facility	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Ohio										
Ohio Field Office	-	-	-	-	-	373	371	390	362	9,102
Fernald Area Office & Plant	-	2,599	3,039	2,795	2,610	2,405	5,022	6,022	5,491	-
Mound Lab	-	9,877	25,288	8,255	7,916	5,243	3,191	6,204	5,431	-
West Valley	-	1,671	1,532	1,479	1,603	1,450	1,286	1,373	1,371	2,072
Total, Ohio	-	14,147	29,859	12,529	12,129	9,471	9,870	13,989	12,655	11,174
Office of Scientific & Tech Information	-	717	544	691	393	523	497	483	210	-
Richland	-	63,770	51,681	36,986	37,734	37,232	36,153	42,885	59,831	57,485
Savannah River Operations Office	-	134,343	113,912	104,970	88,089	82,612	81,766	77,971	104,923	105,964
National Petroleum Tech Office	-	61	200	303	290	265	308	50	10	-
National Energy Technology Laboratory	-	2,035	2,094	2,095	1,349	1,288	1,934	1,906	648	134
Naval Petroleum & Oil Shale Reserves	-	1,179	1,235	1,269	1,254	1,260	658	29	14	-
Strategic Petroleum Reserve	-	17,290	15,405	14,077	13,366	10,999	11,479	11,455	9,936	-
Pittsburgh Naval Reactors	-	-	13,190	11,841	10,831	10,209	11,022	13,096	1,796	-
Schenectady Naval Reactors	-	-	14,295	12,677	12,417	9,716	11,090	10,182	678	-
Western Area Power Administration	-	918	960	806	173	-	-	-	-	-
Nonproliferation & National Security	-	10,821	13,576	11,668	8,551	8,700	7,830	8,925	8,488	-
Headquarters	-	71,711	48,800	56,015	63,355	52,885	49,994	54,754	107,552	103,679
Grand Total, DOE	-	950,129	913,305	842,886	794,546	737,452	729,796	802,609	940,964	835,794

Page 21, Question 1d: In each case where the amount of money recommended by the Office of Safeguards and Security is higher than the amount actually spent on those activities, please indicate why the decision was made not to follow the Office of Safeguards and Security recommendation.

Answer: The Office of Security does not make specific recommendations with respect to the safeguards and security budget of the Department. Again, it is the responsibility of the Office of Security to compile the requests for safeguards and security funding submitted by each Lead Program Secretarial Office (LPSO). With the exception of its role in the conduct of security operations at DOE Headquarters facilities, the Office of Security is primarily a policy development organization. Consequently, the Office of Security has no direct role in the development of individual site budgets. As line managers, each LPSO is entrusted with the responsibility to manage all aspects of their program to include safeguards and security.

Page 21, Question 1e: Do you believe that DOE Program Offices (such as the Defense Programs Office or the Office of Science) should play any role in developing the budget for safeguards and security activities? If so, why do you think that is appropriate, since personnel in these Offices would naturally prefer to obtain additional funds for their own R&D activities rather than spend it on safeguards and security?

Answer: Yes, the Department believes that DOE Program Offices (the National Nuclear Security Administration, Environmental Management, the Office of Science, the Chief Information Officer, and the Office of Security) should play a role in developing the budgets for safeguards and security activities. As the line manager, each Lead Program Secretarial Office (LPSO) is responsible for all aspects of their program, to include safeguards and security. Consequently, it would follow that each organization should play a pivotal role in the development of their respective budgets. Beginning in FY 2001, the Department established specific safeguards and security budgets within the budget requests of each LPSO in the Energy and Water Development Appropriation. This now makes it possible for each LPSO to budget for and manage expenses at the sites for which they are responsible.

Page 21, Question 2:

Who within DOE (please provide name and title) has the authority to ensure that DOE Program Offices are implementing departmental security policies and requirements?

Following the principles of line management, the Secretary has delegated this authority to the Program Offices, who employ their site managers, and ultimately, the security managers, who are directly responsible for implementing departmental security policy. Independent oversight is provided by the Office of Independent Oversight and Performance Assurance (OA.) The Inspector General also reviews selected areas of implementation.

Page 21, Question 1a): The article states that the hacker downloaded administrative and lab budget information. Could he have also downloaded classified information had he chosen to do so? If not, why not?

Response to 1a): The hacker could not have accessed or downloaded classified information. LLNL's classified computer processing is performed on systems which are air-gapped from all of LLNL's unclassified processing systems. The hacker only had access to the network where LLNL processes unclassified information. There was no way for him (or anyone else) to access LLNL's classified processing networks from an unclassified processing network.

Question 1b): The article states that the hacker installed software on the LLNL network to allow him on-going access to the system. How many times did he access the system, and over what timeframe?

Response to 1b): Based on a review of LLNL's logs looking for the hacker's source (IP) addresses as supplied to LLNL by the FBI, the hacker scanned, probed, and accessed LLNL computers a total of 16 times between 11/1/99 and 11/29/99.

Question 1c): What steps has the lab taken since this incident to upgrade cyber-security? More generally, please describe the measures taken DOE-wide to ensure that this does not happen again.

Response to 1c): At the time of this incident, LLNL, was in the process of executing a multi-million dollar upgrade to its cyber-security systems in response to the Department of Energy's April 1999 call for cyber-security upgrades at the DOE Weapon's Labs (in response to the Wen-Ho Lee case.) Much of the needed hardware and software had been procured but was not yet in place. These hardware and software systems were fully implemented when LLNL met its March 2000 milestone date to complete major enhancements to its cyber-security systems. Elements of that system upgrade that most directly apply to this incident are:

- A sophisticated firewall system was installed. This system allows authorized users to access systems behind the firewall but blocks unauthorized scans, probes, and attacks. Systems behind this firewall (including the business systems that had been hacked by this hacker) are now "invisible" to the Internet and are not accessible except by authorized users.
- Major enhancements to LLNL's Intrusion Detection and Response system increased the number and type of intrusion monitors in use and tuned those monitors to do a better job of watching for attacks against Windows systems (the types of systems exploited by this hacker).
- A rigorous program of vulnerability assessment and remediation was put in place. As part of this program, LLNL regularly scans its own computer systems using a commercial vulnerability scanning tool to determine if any LLNL computer systems have serious vulnerabilities. LLNL's vulnerability identification and remediation program requires LLNL programs to fix vulnerable computers or have them removed from the network until they are fixed.

Pages 21-22, Question 1 d):

“Have there been any instances of successful hacking attempts into DOE or DOE-contractor computer systems since this one occurred? If so, please list each one, along with the date the incident occurred, the damage done, and the steps taken in response to ensure that the computer system attacked and the computer systems DOE-wide would be secure from such attacks in the future.”

We believe and the intrusion detection data indicates that DOE sites are making impressive gains in reducing the continuing threats to cyber security. Even as the Threat grows in the form of increased reconnaissance and exploitation efforts, the Department's data shows a continuing decline in the number of successful network intrusions. This trend line has continued and even accelerated over the last three years with total scans and probes rising from 2,317 in FY 1999 to 45,444 in FY 2001, meanwhile, total incidents of intrusions, compromises, or web defacements has dropped from 130 in FY 1999 to just 64 in FY 2001.

This decline in hackers' success is due to a number of efforts pursued by DOE to improve cyber security across the department. The Office of Cyber Security has encouraged and seen ever growing numbers of sites deploying perimeter security through the use of firewalls and active e-mail scanning. Also, DOE sites have taken advantage of the site-license procurements for security products and for training facilitated by CIO. Sixty-three sites are using various ISS and Cybercop products to regularly scan their sites for new vulnerabilities and to do active intrusion detection. Finally, DOE's is in the process of acquiring a mail-server-level anti virus site license, which will also help reduce the number of malicious code events at DOE, a condition that continues to plague federal agencies. In looking at reports for other Federal agencies, DOE sites continue to fare better with less damage or lost time.

As has been noted in the past, there is no magic bullet that will ensure that the computer systems currently secure will remain so in the future. The Threat continues to evolve and as new hardware along with new operating systems is installed, sites will expose themselves to new vulnerabilities. That is why the Department considers security a process, not a one-time event. DOE's near term protection lies in the steps taken already to acquire corporate-wide licenses for useful products, move to one-time or encrypted passwords, and encourage the use of SafePatch, DOE's tool for automated patching. For the future system and network administrators must be given tools that will enable them to easily manage the security on hundreds and thousands of systems. Finally, it should be noted that DOE subscribes to a Risk based philosophy when it comes to managing the cyber security of its unclassified networks. Therefore, there is always residual risk, which must be accepted due to budget constraints and the prohibitive cost of securing, to the n'th degree, non-mission critical systems. Some sites choose to accept this residual risk, finding it cheaper to react than to prevent. In such cases, the missions of those sites support the acceptance of the residual risk.

Compromises reported to CIAC* from October, 1999 – January, 2002

Date	NNSA Sites	Damage	Remediation
8/12/00	DOE-NV	FTP sever compromised, hidden directories installed	System was patched and hidden directories were removed
3/7/00	LANL	FTP server compromised	System was patched and passwords changed
4/21/01	LANL	Web server compromised and defaced	System was patched and passwords changed
12/16/01	LANL	Root-level compromise	System was patched and passwords changed
10/31/99	LLNL	Compromise of E-mail server, intruder sent mail to an AOL account that made it appear to come from the White House	System was patched and passwords changed
12/16/99	LLNL	Root-level compromise	System was patched and passwords changed
11/30/00	LLNL	Root-level compromise	System was patched and passwords changed
1/31/01	LLNL	Employee laptop was compromised at home	System was examined and additional security was applied to laptop
10/19/99	SNL-A	Root-level compromise	System was patched and passwords changed
2/11/00	SNL-A	Root-level compromise, downloaded malicious software	System was patched and passwords were changed. Malicious software was removed
6/14/00	SNL-A	Root-level compromise	System was patched and passwords changed
9/18/00	SNL-A	Root-level compromise	System was patched and passwords changed

* This data reflects only those sites that detected and reported compromises to CIAC. Without negative reporting, we have no means of knowing if these are the only compromises that occurred.

Date	NNSA Sites	Damage	Remediation
1/13/01	SNL-A	Web server compromise and defacement	System was patched and passwords changed
1/19/01	SNL-A	Root-level compromise	System was patched and passwords changed
3/5/01	SNL-A	Root-level compromise	System was patched and passwords changed
4/17/01	SNL-A	Web server compromise and defacement	System was patched and passwords changed
11/27/01	SNL-A	Root-level compromise	System was patched and passwords changed
9/19/00	SNL-LIV	User level compromise as "anonymous"	System was patched and passwords changed
7/23/01	SNL-LIV	Root-level compromise	System was patched and passwords changed
12/21/01	SNL-LIV	Root-level compromise	System was patched and passwords changed
9/14/00	WIPP	Compromised system used to scan other systems	Hard drive sent to DOE Forensics Lab for examination

Date	Office of Science Sites	Damage	Remediation
11/17/99	DOE-CHO	Web server compromised and defaced	System was patched and passwords changed
11/18/99	DOE-CHO	Web server compromised and 1 Trojan file installed	System was patched and Trojanned file removed

Date	Office of Science Sites	Damage	Remediation
11/27/01	BNL	Root-level compromise	System was patched and passwords changed
12/17/01	BNL	Root-level compromise	System was patched and passwords changed
1/18/02	BNL	Root-level compromise	System was patched and passwords changed
7/10/00	FNAL	Web server compromised and defaced	System was patched and passwords changed
7/11/00	FNAL	Multiple systems suffered a root-level compromise	Systems were patched and passwords changed
1/22/01	FNAL	Ramen Worm incident compromised two systems	Systems were patched and passwords changed
4/4/01	FNAL	Lion Worm incident	System was patched and passwords changed
9/12/01	FNAL	User-level compromise, IRC bot installed	System was patched, malicious software was removed, passwords changed
11/12/01	FNAL	Root-level compromise	System was patched and passwords changed
12/6/01	FNAL	Root-level compromise	System was patched and passwords changed
10/5/99	GAT	Root-level compromise, sniffer installed potentially compromising user IDs and passwords	System was patched, malicious software was removed, passwords changed
12/3/99	LBNL	Root-level compromise	System was patched and passwords changed
12/7/99	LBNL	Root-level compromise with backdoor left	System was patched and backdoors were removed
1/3/00	LBNL	Root-level compromise	System was patched and passwords changed
2/16/00	LBNL	Root-level compromise	System was patched and passwords changed
2/23/00	LBNL	Root-level compromise with backdoor left	System was patched and backdoors were removed

Date	Office of Science Sites	Damage	Remediation
2/29/00	LBNL	User-level compromise using sniffed password; attempts to gain root were blocked	Passwords were changed
3/11/00	LBNL	Root-level, E-mail server compromised	System was patched and passwords changed
4/1/00	LBNL	Backdoor discovered on system	System was patched and backdoors were removed
5/22/00	LBNL	Web server compromised and defaced	System was patched and passwords changed
6/5/00	LBNL	User-level compromise, attempts to gain root failed	System was patched and passwords changed
10/18/00	LBNL	Root-level compromise	System was patched and passwords changed
11/22/00	LBNL	Root-level compromise, IRC installed	System was patched, malicious software was removed, passwords changed
5/25/01	LBNL	User-level compromise with a sniffed password	System was patched and passwords changed
6/6/01	LBNL	User-level compromise	System was patched and passwords changed
6/25/01	LBNL	Root-level compromise	System was patched and passwords changed
9/12/01	LBNL	Root-level compromise	System was patched and passwords changed
11/1/01	LBNL	Root-level compromise	System was patched and passwords changed
11/15/01	LBNL	Root-level compromise	System was patched and passwords changed
1/25/02	LBNL	Root-level compromise on two systems	Systems were patched and passwords changed
6/13/01	LBNL- NERSC	Root-level compromise	System was patched and passwords changed
11/14/01	LBNL- NERSC	Root-level compromise	System was patched and passwords changed
12/10/01	LBNL- NERSC	Root-level compromise	System was patched and passwords changed
11/1/99	ORNL	User-level compromise due to a sniffed password	Passwords were changed

Date	Office of Science Sites	Damage	Remediation
12/15/99	ORNL	User-level compromise due to a sniffed password, the intruder downloaded hacker tools used to scan systems to find other vulnerabilities	The password was changed. Malicious software was removed
1/12/00	ORNL	Web server compromised and defaced	System was patched and passwords changed
2/6/00	ORNL	User-level compromise due to a sniffed password. Intruder copied the password file, downloaded hacker files and attempted to gain root-level access	Passwords were changed. Malicious software was removed
3/10/00	ORNL	Root-level compromise, copied hacker file, and installed Trojan programs	System was patched and passwords were changed. Malicious software was removed
5/6/00	ORNL	Root-level compromise. Installed IRC on the system	System was patched and passwords were changed. Malicious software was removed
5/7/00	ORNL	User-level compromise due to a sniffed password. Intruder became "root" and installed a sniffer, downloaded hacker files, and attempted to log into many other systems	Passwords were changed. Malicious software was removed
9/10/00	ORNL	User-level compromise due to a sniffed password	Passwords were changed
1/3/01	ORNL	Root-level compromise	System was patched and passwords changed
3/7/01	ORNL	Root-level compromise	System was patched and passwords changed
3/8/01	OSTI	Web server compromise and defacement	System was patched and passwords changed
3/19/01	PPPL	Root-level compromise	System was patched and passwords changed
6/3/00	TJNAF	User-level compromise	System was patched and passwords changed

Date	Office of Science Sites	Damage	Remediation
7/24/00	TJNAF	User-level compromise, IRC 'bot (eggdrop) was installed	System was patched and passwords were changed. Malicious software was removed
1/11/02	TJNAF	Root-level compromise	System was patched and passwords changed

Date	Environ. Mgmt.	Damage	Remediation
11/29/99	Hanford Envir. Health Found.	Web server compromised and defaced	System was patched and passwords changed
1/11/01	INEEL	Compromise, downloaded the Newdesk password file	System was patched and passwords changed
11/16/01	INEEL	Root-level compromise	System was patched and passwords changed
10/19/99	PNNL	Remote monitoring system in Alaska suffered a root-level compromise, intruder installed a sniffer and a keyboard sniffer	System was patched and passwords were changed. Malicious software was removed
4/10/01	PNNL	Root-level compromise; system used to scan other systems	System was patched and passwords changed
12/3/01	PNNL	Root-level compromise	System was patched and passwords changed

Date	Energy Effic. & Renewable Energy	Damage	Remediation
4/26/01	DOE-GFO	Root-level compromise	System was patched and passwords changed
11/4/99	NREL	Web server compromised and defaced	System was patched and passwords changed
4/10/01	NREL	Root-level compromise	System was patched and passwords changed

Date	CIO Sites	Damage	Remediation
-------------	------------------	---------------	--------------------

Date	CIO Sites	Damage	Remediation
11/29/99	DOE-HQ	Web server compromised and defaced	System was patched and passwords changed. (Note: At the time the server was located at an off-site contractor.) Subsequently, this server has been: (1) moved to the headquarters network, (2) placed behind a firewall. (3) limited to SSL(port 443) for Internet access, and (4) routinely scanned for known vulnerabilities.
8/22/00	DOE-HQ	Root-level compromise and IRC created	System was patched, malicious software was removed, passwords changed. The server is currently hosted off-site, is scanned regularly, and is behind a firewall.

Date	EIA Sites	Damage	Remediation
1/7/02	DOE-EIA	Compromise	System was patched and passwords changed

p. 23

Question 1f): The November 21, 2001 DNFSB letter states that the "KAMS facility, which will be relied upon for such storage at Savannah River Site, is an aged facility and was never intended to provide more than interim storage. Maintaining KAMS for prolonged use beyond its design life could prove to be impractical." Given the current anticipated problems in implementing the plutonium disposition program both in the U.S. and Russia, plutonium storage may be needed for a period of time considerably longer than 10 years. If longer-term storage is anticipated, please describe the process to certify that KAMS will be secure for long-term storage of up to 50 years. Will DOE also consider removal of the plutonium to a more secure, dedicated storage facility, and if so, where will it be located?

2) Has DOE conducted a site-wide evaluation to determine the most secure facilities where pit and non-pit plutonium should be stored for the long-term? Please describe the process by which DOE has chosen the KAMS facility for non-pit plutonium and how other new or existing facilities, including the Device Assembly Facility at the Nevada Test Site and the Kirtland Underground Munitions Storage Complex in New Mexico, were evaluated for this important mission for both pit and non-pit materials. Also, please describe where plutonium pits will be stored at SRS as part of the plutonium disposition program and what type of security will be applied to that facility.

DOE conducted a complex-wide evaluation for the long-term storage (of up to 50 years) of plutonium for the Storage and Disposition of Weapons-Usable Fissile Materials Final Programmatic Environmental Impact Statement. Each of the nuclear weapons complex sites (excluding the national laboratories) identified candidate existing facilities or locations for new facilities for the storage of pit and non-pit plutonium. The DOE evaluation addressed the environmental impacts of upgrades to the candidate facilities and construction of new facilities as well as operations at each site. The evaluation also considered the environmental impacts of the transportation of plutonium from one site to another. The Nevada Test Site Device Assembly Facility was evaluated for the storage of pits and non-pit materials, whereas the Kirtland Underground Munitions Storage Complex was evaluated only for the storage of pits because of the limited plutonium handling experience at that location. DOE, in addition to the environmental analysis, also considered security and the costs of long-term storage at each of the candidate facilities in support of determining a plutonium storage strategy.

DOE performed a supplement analysis to the Storage and Disposition of Weapons-Usable Fissile Materials Final Programmatic Environmental Impact Statement to evaluate the suitability of the K-Area Materials Storage (KAMS) facility at Savannah River Site (SRS) for non-pit plutonium storage. Several other facilities at SRS, such as Building 105-L, Building 247-F and the Plutonium Storage Facility were also considered for the storage of non-pit plutonium. The analysis took into account the existing security features of the KAMS facility, such as hardened structures, security boundaries and monitoring systems, and the adaptability of the KAMS for safe storage of plutonium in shipping containers. The cost of upgrades and storage was also considered.

DOE's strategy is to store surplus pits at Pantex in Zone 4 pending disposition. The pits would be shipped from Pantex to the Pit Disassembly and Conversion Facility (PDCF) at SRS at a rate supporting the facility's operations. The amount of pits stored in the PDCF would be determined by its operations. The stored weapons security standard would be applied to the storage of pits at PDCF.